

REMARKS

By this amendment, Applicants have amended the drawings to add new Figure 15c to describe the subject matter previously disclosed at page 21, line 2, page 23, lines 16, especially page 23, lines 4-16, and in original claims 3 and 4. Applicants have amended page 6, line 18, and page 23, line 16 to provide a brief and detailed description, respectively, of new Figure 15c.

Applicants have also canceled non-elected claims 7-10, without prejudice or disclaimer.

The Examiner has objected to the drawings under 37 CFR §1.83(a) as allegedly not showing every feature of the invention specified in the claims. Applicants have now added new Figure 15c showing the features specified in claims 3 and 4. It is submitted Figure 15c is supported by the description at page 21, line 2 to page 23, line 16 and in original claims 3 and 4. Accordingly, new Figure 15c does not introduce new matter to the application. In view of the addition of Figure 15c, reconsideration and withdrawal of the objection to the drawings are requested.

Claims 1-3, 5 and 6 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,060,531 to Iguchi et al. Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Iguchi et al. Applicants traverse these rejections and request reconsideration thereof.

The present invention relates to a screw compressor that includes a casing and male and female rotors formed with axially twisted screw grooves accommodated in the casing. The rotors are rotated by timing gears fixed to the respective rotors while a desired minute gap is kept therebetween. The respective rotors include concave stripes having a minute depth and provided on respective

screw grooves to extend along directions of twist thereof. The concave strips reduce leakage of compressed air and provide a high compression efficiency.

The patent to Iguchi et al. discloses a screw rotor in which one of the male and female rotor elements is coated with a coating which is different in hardness from the other uncoated element. The Iguchi et al. patent also discloses a conventional screw rotor in which both of the male and female rotors have a coating, e.g., polytetrafluoroethylene, applied thereto. While the Examiner refers to element 9 of Iguchi et al. as being "concave strips," element 9 in Figure 2 of Iguchi refers to the polytetrafluoroethylene coating. Neither element 9 of Iguchi et al. (nor element 11) represents concave strips. Thus, Iguchi et al. patent does not disclose and would not have suggested male and female rotors including concave strips having a minute depth provided on the respective screw grooves to extend along directions of twist thereof.

The coating 9 or 11 of Iguchi et al. is simply not the "concave strips" presently claimed, despite the allegation to the contrary in the outstanding Office Action. Accordingly, the presently claimed invention is patentable over Iguchi et al.

Applicants note the Examiner has cited a number of documents as being pertinent to Applicants' disclosure. However, since these documents were not applied and rejected claims formally in the application, further discussions of these documents unnecessary.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all of the claims now in the application are requested.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 500.42876X00),  
and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

  
Alan E. Schiavelli  
Registration No. 32,087

AES/at  
(703) 312-6600